



#3

PATENT  
Docket No. 509952000100**DECLARATION FOR UTILITY PATENT APPLICATION**

AS A BELOW-NAMED INVENTOR, I HEREBY DECLARE THAT:

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am the original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled: **MAXIMIZING EXPECTED GENERALIZATION FOR LEARNING COMPLEX QUERY CONCEPTS**, the specification of which is attached hereto unless the following box is checked:

☒ was filed on December 21, 2001 as United States Application Serial No. 10/032,319.

I HEREBY STATE THAT I HAVE REVIEWED AND UNDERSTAND THE CONTENTS OF THE ABOVE-IDENTIFIED SPECIFICATION, INCLUDING THE CLAIMS, AS AMENDED BY ANY AMENDMENT REFERRED TO ABOVE.

I acknowledge the duty to disclose information which is material to the patentability as defined in 37 C.F.R. § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed:

Application No.	Country	Date of Filing (day/month/year)	Priority Claimed?
			<input type="checkbox"/> Yes <input type="checkbox"/> No

I hereby claim benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

Application Serial No.	Filing Date
60/292,820	May 22, 2001
60/281,053	April 2, 2001

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information which is material to

patentability as defined in 37 C.F.R. § 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

Application Serial No.	Filing Date	Status
		<input type="checkbox"/> Patented <input type="checkbox"/> Pending <input type="checkbox"/> Abandoned

I hereby appoint the following attorneys and agents to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

Lisa A. Amii (Reg No. 48,199)	Randolph Ted Apple (Reg No. 36,429)
Mehran Arjomand (Reg No. 48,231)	Laurie A. Axford (Reg No. 35,053)
Sanjay S. Bagade (Reg No. 42,280)	Erwin J. Basinski (Reg No. 34,773)
Shantanu Basu (Reg No. 43,318)	Richard R. Batt (Reg No. 43,485)
Vincent J. Belusko (Reg No. 30,820)	Jonathan Bockman (Reg No. 45,640)
Kimberly A. Bolin (Reg No. 44,546)	Barry E. Bretschneider (Reg No. 28,055)
Tyler S. Brown (Reg No. 36,465)	Nicholas Buffinger (Reg No. 39,124)
A. Randall Camacho (Reg No. 46,595)	Mark R. Carter (Reg No. 39,131)
Robert K. Cerpa (Reg No. 39,933)	Peng Chen (Reg No. 43,543)
Alex Chartove (Reg No. 31,942)	Thomas Chuang (Reg No. 44,616)
Thomas E. Ciotti (Reg No. 21,013)	Cara M. Coburn (Reg No. 46,631)
Matthew M. D'Amore (Reg No. 42,457)	Raj S. Davé (Reg No. 42,465)
Peter Davis (Reg No. 36,119)	David Devernoe (Reg No. P-50,128)
Karen B. Dow (Reg No. 29,684)	Stephen C. Durant (Reg No. 31,506)
Carolyn A. Favorito (Reg No. 39,183)	David L. Fehrman (Reg No. 28,600)
Hector Gallegos (Reg No. 40,614)	Thomas George (Reg No. 45,740)
Deborah S. Gladstein (Reg No. 43,636)	Debra J. Glaister (Reg No. 33,888)
Kenneth R. Glick (Reg No. 28,612)	Bruce D. Grant (Reg No. 47,608)
Johney U. Han (Reg No. 45,565)	Douglas G. Hodder (Reg No. 41,840)
Alan S. Hodes (Reg No. 38,185)	Charles D. Holland (Reg No. 35,196)
Kelvan P. Howard (Reg No. P48,999)	Peter Hsieh (Reg No. 44,780)
Jill A. Jacobson (Reg No. 40,030)	Wayne Jaeschke, Jr. (Reg No. 38,503)
Madeline I. Johnston (Reg No. 36,174)	Parisa Jorjani (Reg No. 46,813)
Ararat Kapouytian (Reg No. 40,044)	Richard C. Kim (Reg No. 40,046)
Cameron A. King (Reg No. 41,897)	Lawrence B. Kong (Reg No. P49,043)
Kawai Lau (Reg No. 44,461)	Glenn Kubota (Reg No. 44,197)
Rimas T. Lukas (Reg No. 46,451)	Michael J. Mauriel (Reg No. 44,226)
Gladys H. Monroy (Reg No. 32,430)	Philip A. Morin (Reg No. P-45,926)
Kate H. Murashige	Mabel Ng (Reg No. P48,922)
Martin M. Noonan (Reg No. 44,264)	Catherine M. Polizzi (Reg No. 40,130)
Phillip Reilly (Reg No. 41,415)	Robert E. Scheid (Reg No. 42,126)
Debra A. Shetka (Reg No. 33,309)	Terri Shieh-Newton (Reg No. 47,081)
Kevin R. Spivak (Reg No. 43,148)	Stanley H. Thompson (Reg No. 45,160)
Thomas L. Treffert (Reg No. P48,279)	Brenda J. Wallach (Reg No. 45,193)
Michael R. Ward (Reg No. 38,651)	E. Thomas Wheelock (Reg No. 28,825)
Todd W. Wight (Reg No. 45,218)	Eric Witt (Reg No. 44,408)
Frank Wu (Reg No. 41,386)	David T. Yang (Reg No. 44,415)

Peter J. Yim (Reg No. 44,417)  
Karen R. Zachow (Reg No. 46,332)

George C. Yu (Reg No. 44,418)

and:

Please direct all communications to:

Stephen C. Durant  
Morrison & Foerster LLP  
425 Market Street  
San Francisco, California 94105-2482

Please direct all telephone calls to Stephen C. Durant at (415) 268-6982.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Feb 26, 2002

Date

Edward Chang

Name: Edward Y. CHANG  
Residence: 816 Dorado Drive, Santa Barbara, California 93111  
Citizenship: USA  
Post Office Address: 816 Dorado Drive, Santa Barbara, California 93111

Feb. 21, 2002

Date

Kwang-Ting Cheng

Name: Kwang-Ting CHENG  
Residence: 5340 Jean Lane, Santa Barbara, California 93111  
Citizenship: USA  
Post Office Address: 5340 Jean Lane, Santa Barbara, California 93111



THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of:

Edward Y. CHANG, et al.

Serial No.: 10/032,319

Filing Date: December 21, 2001

For: MAXIMIZING EXPECTED  
GENERALIZATION FOR LEARNING  
COMPLEX QUERY CONCEPTS

Examiner: To Be Assigned

Group Art Unit: To Be Assigned

**PROSECUTION BY ASSIGNEE AND POWER OF ATTORNEY  
UNDER 37 C.F.R. § 3.71**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

Morpho Software, Inc., the assignee of the entire right, title and interest in this patent application, under 37 C.F.R. § 3.71 hereby appoints:

Lisa A. Amii (Reg No. 48,199)  
Mehran Arjomand (Reg No. 48,231)  
Sanjay S. Bagade (Reg No. 42,280)  
Shantanu Basu (Reg No. 43,318)  
Vincent J. Belusko (Reg No. 30,820)  
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Todd W. Wight (Reg No. 45,218)  
Frank Wu (Reg No. 41,386)  
Peter J. Yim (Reg No. 44,417)  
Karen R. Zachow (Reg No. 46,332)

all of Morrison & Foerster LLP, 425 Market Street, San Francisco, California 94105-2482, telephone (415) 268-7000, to prosecute this application and transact all matters in the United States Patent and Trademark Office connected therewith, said appointment to be to the exclusion of the inventors and their attorneys in accordance with the provisions of 37 C.F.R. § 3.71 provided that if any one of said attorneys or agents ceases being affiliated with the law firm of Morrison & Foerster as partner, employee or of counsel, such attorney's or agent's appointment as attorney or agent and all powers derived therefrom shall terminate on the date such attorney or agent ceases being so affiliated.

Please direct all written communications relative to this application to:

Stephen C. Durant  
Morrison & Foerster LLP  
425 Market Street  
San Francisco, California 94105-2482

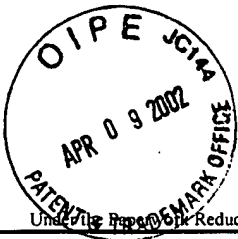
Please direct all telephone communications to Stephen C. Durant at (415) 268-6982.

Morpho Software, Inc.  
a California corporation

Dated: Feb 26, 2002

Edward Chang

Name: Edward Y. CHANG  
Title: Co-founder & Chief Technical Advisor  
Address: 816 Dorado Drive  
Santa Barbara, California 93111



#6

**STATEMENT UNDER 37 CFR 3.73(b)**

Applicant/Patent Owner: Edward Y. CHANG, et al.  
Application No./Patent No.: 509952000100 Filed/Issue Date: December 21, 2001  
Entitled: MAXIMIZING EXPECTED GENERALIZATION FOR LEARNING COMPLEX QUERY CONCEPTS  
Morpho Software, Inc., a corporation  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.  
The extent (by, percentage) of its ownership interest is \_\_\_\_\_ %

in the patent application/patent identified above by virtue of either:

- A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

- ☒ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

March 27, 2002  
Date

Stephen C. Durant  
Stephen C. Durant

\_\_\_\_\_  
Attorney  
Title

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

# ASSIGNMENT JOINT

THIS ASSIGNMENT, by Edward Y. CHANG and Kwang-Ting CHENG (hereinafter referred to as the assignors), residing at 816 Dorado Drive, Santa Barbara, California 93111 and 5340 Jean Lane, Santa Barbara, California 93111, respectively, witnesseth:

WHEREAS, said assignors have invented certain new and useful improvements in MAXIMIZING EXPECTED GENERALIZATION FOR LEARNING COMPLEX QUERY CONCEPTS, set forth in an application for Letters Patent of the United States, having an oath or declaration executed on even date herewith, bearing Serial No. 10/032,319 and filed on December 21, 2001; and

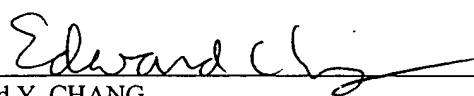

WHEREAS, Morpho Software, Inc., a corporation duly organized under and pursuant to the laws of California and having its principal place of business at 816 Dorado Drive, Santa Barbara, California 93111 (hereinafter referred to as the assignee) is desirous of acquiring the entire right, title and interest in and to said inventions and said application for Letters Patent of the United States, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon:

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient consideration, the receipt of which is hereby acknowledged, said assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto said assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions, application for Letters Patent, and any and all Letters Patent or Patents in the United States of America and all foreign countries which may be granted therefor and thereon, and in and to any and all divisions, continuations and continuations-in-part of said application, or reissues or extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by said assignee, for its own use and the use of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted, as fully and entirely as the same would have been held and enjoyed by the assignors, had this sale and assignment not been made.

AND for the same consideration, said assignors hereby covenant and agree to and with said assignee its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, said assignors are the sole and lawful owners of the entire right, title and interest in and to said inventions and the application for Letters Patent above-mentioned, and that the same are unencumbered and that said assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, said assignors hereby covenant and agree to and with said assignee, its successors, legal representatives and assigns, that said assignors will, whenever counsel of said assignee, or the counsel of its successors, legal representatives and assigns, shall advise that any proceeding in connection with said inventions, or said application for Letters Patent, or any proceeding in connection with Letters Patent for said inventions in any country, including interference proceedings, is lawful and desirable, or that any division, continuation or continuation-in-part of any application for Letters Patent or any reissue or extension of any Letters Patent, to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of Letters Patent for said inventions, without charge to said assignee, its successors, legal representatives and assigns, but at the cost and expense of said assignee, its successors, legal representatives and assigns.

AND said assignors hereby request the Commissioner of Patents to issue said Letters Patent of the United States to said assignee as the assignee of said inventions and the Letters Patent to be issued thereon for the sole use of said assignee, its successors, legal representatives and assigns.

<u>Feb 26, 2002</u> Date	 Edward Y. CHANG
<u>Feb. 21, 2002</u> Date	 Kwang-Ting CHENG